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Shen Chih-Chiang

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THOMAS, KAYDEN, HORSTEMEYER & RISLEY, LLP  
100 GALLERIA PARKWAY, NW  
STE 1750  
ATLANTA, GA 30339-5948

EXAMINER

NGUYEN BA, HOANG VU A

ART UNIT

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/692,989	<b>Applicant(s)</b> CHIH-CHIANG ET AL.	
	<b>Examiner</b> Hoang-Vu A. Nguyen-Ba	<b>Art Unit</b> 2623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 24 October 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 October 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. This action is responsive to the application filed October 24, 2003.
2. Claims 1-10 have been examined. Claims 1 and 8 are independent claims.

#### *Priority*

3. The priority date considered for this application is April 3, 2003, which is the filing date of the Taiwanese Patent Application No. 92107598. A certified copy of the priority application has been received and placed in the application file.

#### *Oath/Declaration*

4. The Office acknowledges receipt of a properly signed oath/declaration filed April 3, 2003.

#### *Drawings*

5. The drawings are objected to because of the following informalities:
  - i. FIGs. 1 and 2 should be labeled as Prior Art;
  - ii. in FIG. 4, step S30, the term "unit" should be – units --; it is also respectfully suggested that the criteria in the decision blocks S30, S40, S60 and S90 be formulated as an interrogative sentence (e.g., -- Is the data flow fixed? --).

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered

and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### *Specification*

6. The specification is objected to because of the following minor informalities: the title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

### *Claim Rejections – 35 USC § 101*

7. 35 U.S.C. § 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the condition and requirements of this title.

8. Claims 1-5 and 7 are rejected under 35 U.S.C. § 101 because the claimed invention is directed to non-statutory subject matter.

Claim 1 recites an apparatus where all elements (e.g., virtual playback unit, multitasking unit, and data stream buffer unit) would reasonably be interpreted by one of ordinary skill in light of the disclosure as software (see p. 5, lines 12-14), such that the apparatus is software, per se (also see Claim 7).

The claimed components of the apparatus are merely software components,

i.e., computer programs per se. Such claimed matter, which is functional descriptive material per se, is not statutory because it is not a physical “thing” nor a statutory process as there are no “acts” being performed. Such claimed computer program does not define any structural and functional interrelationships between the computer program and other claimed aspects of the invention which permit the computer’s program’s functionality to be realized. Since a computer program is merely a set of instructions capable of being executed by a computer, the program itself is not a process, without the computer-readable medium needed to realize the computer’s functionality. In contrast, a claimed computer-readable medium encoded with a computer program defines structural and functional interrelationships between the computer program and the medium which permit the computer program’s functionality to be realized, and is thus mandatory. *Warmerdam*, 33 F.2d at 1361, 31 USPQ 2d at 1760. *In re Sarkar*, 588 F.2d 1330, 1333, 200 USPQ 132, 137 (CCPA 178). See MPEP §2106 (IV)(B)(1)(a).

Claims 2-5 and 7, which depend from Claim 1 and which do not appear to limit the claimed subject matter to a tangible computer-readable storage medium are also rejected under 35 U.S.C. § 101 for the same reason.

Claims 8-10 recite a method for multimedia data stream production comprising the steps of calculating playback times of a video data pack and audio data pack and decoding source video data stream and audio data stream into respective video and audio data packs. This method uses the same software components claimed in Claim 1 to perform the recited steps.

Although recognizing that transformation of data is being claimed in Claim 8 (e.g., decoding data streams into data packs), the Office interpretation of Claim 8 is that the claimed subject matter is not explicitly or implicitly limited to a

machine or manufacture (e.g., computer-readable storage medium), which has a practical application of an abstract idea (calculation and code conversion in this instance) that produces “a useful, concrete and tangible result.” Considering the claim as a whole, it is unclear as to the usefulness and tangibility of the final result (i.e., converting the video and audio data streams into respective video and audio data packs) of the decoding process.

Claims 9-10, which depend from Claim 8, are also rejected under 35 U.S.C. § 101 for the same reasons.

### ***Claim Rejections – 35 USC § 102***

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejection under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for the purposes of this subsection of an application filed in the United States and was published under Article 21(2) of such treaty in the English language

10. Claims 1-6 and 8-10 are rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 7,054,544 by Tanaka.

### **Claim 1**

Tanaka discloses at least an *apparatus for multimedia data stream production, comprising:*

*a virtual playback unit, decoding a multimedia data stream into a plurality of decoded*

*video data packs and a plurality of decoded audio data packs sequentially (see at least FIG. 3, item 2);*

*a multitasking unit, analyzing the decoded video data packs and the decoded audio data packs to decode a source video data stream into a source video data pack or a source audio data stream into a source audio data pack (see at least FIG. 3, items 13 and 4);*  
*and*

*a data stream buffer unit, storing the source video data pack and the source audio data pack for integration into the multimedia data stream (see at least FIG. 3, block 1).*

## **Claim 2**

The rejection of base claim 1 is incorporated. Tanaka further discloses *wherein the virtual playback unit further comprises:*

*a decoding unit, decoding the multimedia data stream and retrieving the decoded video data packs and the decoded audio data packs (see at least FIG. 3, blocks 3, 5 and 4);*

*a video data register unit, registering the decoded video data packs sequentially (see at least FIG. 3, block 13); and*

*an audio data register unit, registering the decoded audio data packs sequentially (see at least FIG. 3, block 5).*

## **Claim 3**

The rejection of base claim 1 is incorporated. Tanaka further discloses *wherein the multitasking unit further comprises:*

*an analysis unit, analyzing the decoded video data packs and the decoded audio data packs to produce an analysis result (see at least FIG. 3, block 3);*

*a selection unit, outputting source video data stream or the source audio data stream according to the analysis result (see at least FIG. 3, block 3; and*

*an encoding unit, receiving source video data stream or the source audio data stream output from the selection unit (see at least FIG. 3, blocks 5 and 6), and decoding thereof into source video data pack or the source audio data pack (see at least FIG. 3, block 11).*

#### **Claim 4**

The rejection of base claim 1 is incorporated. Tanaka further discloses *wherein the multitasking unit decodes source video data stream into source video data pack if the decoded video data packs are less than the decoded audio data packs in the virtual playback unit (see at least 11:56 – 12:20; 12:46-55; FIG. 4, step 8).*

#### **Claim 5**

The rejection of base claim 1 is incorporated. Tanaka further discloses *wherein the multitasking unit decodes the source audio data stream into the source audio data pack if there are fewer decoded audio data packs than decoded video data packs in the virtual playback unit (see at least 12:12-45).*

#### **Claim 6**

The rejection of base claim 1 is incorporated. Tanaka further discloses *a storage unit writing the multimedia data stream of the data stream buffer unit into a storage medium sequentially (see at least FIG. 3, block 1).*

#### **Claim 8**

Tanaka discloses at least a *method for multimedia data stream production, comprising the steps of:*



*calculating playback time of a decoded video data pack (see at least 10:54 - 11:56; FIG. 4, step S7);*

*calculating playback time of a decoded audio data pack (see at least 11:56 – 12:20; FIG. 4, step S6);*

*decoding a source video data stream into a source video data pack if the playback time of the decoded video data pack is shorter than the playback time of the decoded audio data (see at least 11:56 – 12:20; 12:46-55; FIG. 4, step 8); and*

*decoding a source audio data stream into a source audio data pack if the playback time of the decoded audio data pack is longer than the output time of the decoded video data pack (see at least 12:21-45; FIG. 4, steps S2-S5).*

#### **Claim 9**

The rejection of base claim 8 is incorporated. Tanaka further discloses *integrating the source video data pack and the source audio data pack sequentially into a multimedia data stream (see at least FIG. 3, stream from block 1 to block 3).*

#### **Claim 10**

The rejection of base claim is incorporated. Tanaka further discloses *wherein the decoded video data pack and the decoded audio data pack are decoded from the multimedia data stream (see at least FIG. 3, video data channeled from block 3 to block 13 and audio data from block 3 to block 5).*

#### ***Claim Rejections – 35 USC § 103***

11. The following is a quotation of the 35 U.S.C. § 103(a) which form the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claim 7 is rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 7,054,544 by Tanaka.

### Claim 7

The rejection of base claim 1 is incorporated. Tanaka does not specifically disclose *wherein the apparatus is a production software*.

It was known at the time of the invention that merely providing an automatic means to replace an activity performed by a device which accomplishes the same result is not sufficient to distinguish over the prior art, *In re Venner*, 262 F.2d 91, 95, 120 USPQ 193, 194 (CCPA 1958). For example, simply coding the steps performed by the components of the apparatus recited in Claim 1 gives one just what one would expect from the components disclosed in Tanaka. In other words there is no enhancement found in the claimed apparatus being a production software. The claimed apparatus being a production software only provides automating the function(s) of the physical components. The end result is the same as compared to the physical apparatus. A computer program can simply perform the functions of an physical apparatus without the required presence of the physical components. The result is the same.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to automate the functions performed by the claimed components with a computer program because this would ensure the synchronization

of the decoded audio data with the video data, which is purely known, and an expected result from automation of what is known in the art.

### *Conclusion*

13. The prior art made of record and not relied upon is considered pertinent to Applicant's disclosure.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hoang-Vu "Antony" Nguyen-Ba whose telephone number is (571) 272-3701. The examiner can normally be reached on Tuesday-Friday from 7:00 am to 5:30 pm.

If attempts to reach the examiner are unsuccessful, the examiner's supervisor, John Miller can be reached at (571) 272-7353.

The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Any inquiry of a general nature or relating to the status of this application should be directed to the TC 2600 Group receptionist (571) 272-2600.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at (866) 217-9197 (toll-free).



August 15, 2007

ANTONY NGUYEN-BA  
PRIMARY EXAMINER  
TECHNOLOGY CENTER 2100